



## ROOF TILE FACT SHEET

### ◆ THERMAL PERFORMANCE

The density of concrete and terracotta roof tiles provides highly effective thermal insulation, relative to other roofing materials.

Roof tiles keep you comfortable in your home all year round and contribute to energy savings. In winter they help keep the cold out and the warmth in. In summer they keep the heat out and the cool in.

Colours have a limited impact on thermal performance.

Dark colours are believed to attract greater heat, but the difference in heat transmission between dark and light coloured roofs is minimal. Light coloured roofs have been thought to reflect more heat away from the home, however there is no reason a dark roof cannot perform similarly with simple inclusions such as sarking, insulation and ventilation. The addition of sarking under tiles considerably reduces the need for cooling in the home and is recommended in all applications.

### ◆ SOUND PROOF – ACOUSTICS

Roof tiles assist in keeping unwanted noise out.

The density of tiles helps reduce external sound, such as aircraft and road noise and particularly rain and hail.

Levels of sound insulation performance far exceed the minimum required by the Building Code of Australia.

A study found that roof tiles can reduce external noise by as much as 30 decibels, compared with a reduction of 12 decibels for sheet metal.



#### ◆ FIRE RESISTANCE

Non-combustible materials such as concrete and terracotta provide excellent protection against radiant heat from bushfires.

Tiled roofs have been tested and pass the requirements of AS3959-2009 for fire zoon construction.

#### ◆ DURABILITY

Concrete and terracotta tiles can be expected to perform in Australian cities for a minimum of 50 years.

'Exposure' grade roof tiles have an excellent record of durability under all exposure conditions, including severe marine environments.

Terracotta tiles have been used for thousands of years because of its incredible durability Terracotta roof tiles will never fade. Even after years on your roof with the sun beating down and the wind and rain battering away, terracotta tiles retain their colour.

In some climates, moss and lichen can grow on your tiles. They will not affect your tiles in any way, and can be easily removed.

#### ◆ LOW MAINTENANCE

Once tiles are installed there is little or no maintenance.

Roof tiles will never rust, warp or corrode; a problem with other roofing materials.

Should a section of the roof ever be damaged or require modification (eg. installing a skylight), only the affected tiles usually require replacement or removal.

#### ◆ RAINWATER AND TANK SAFETY

Rainwater collected from tiled roofs will be compliant with World Health Organisation standards for drinking, as both concrete and terracotta roof tiles are non-toxic.

#### ◆ SALT SAFE

Concrete and terracotta tiles are salt safe and frost resistant making them suitable for any location including coastal areas and sites with close proximity to breaking surf.

#### ◆ VERSATILITY

Roof Tiles are made in many different colours and a wide range of architectural styles and specifications.

You can combine different finishes and shades to create a roof that is as subtle or dramatic as your design.

Concrete tiles are available in Australia in a range of at least 18 different colours, including both plain and mottled.

#### ◆ WIND RESISTANCE

Tiled roofs can be designed and built for all wind exposure conditions, including cyclone areas.

The use of a flexible pointing material to fix ridge capping can enhance security in high winds.

The weight of the tiled roof will enhance its performance in high wind areas.

Terracotta and concrete roof tiles offer more resistance to wind suction than lighter weight materials such as steel sheeting.

#### ◆ STRENGTH

Concrete and terracotta tiles are made to strict strength specifications that meet Australian and New Zealand Standards.

Concrete tiles do not become brittle or porous with old age. In fact, independent testing indicates that concrete tiles actually strengthen and become less porous over time.

Roof tiles have sufficient strength to withstand normal handling stresses and occasional foot traffic on the roof for maintenance access purposes.

