

WHY ROOF TILES?



Energy Efficiency

Roof tiles provide efficient passive heating and cooling, helping to reduce the need for air conditioning which can account for 40% of household energy usage.



Durability

Roof tiles require little to no maintenance, reflected in the extended warranty they often come with compared to sheet metal products. Concrete roof tiles even get stronger as they age!



Sustainability

Both clay and concrete roof tiles are made from natural materials and have lower embodied carbon than other roofing materials.



Home Comfort

Roof tiles can reduce noise by 30 decibels and will reflect more heat than other commonly used roofing materials, granting you greater internal comfort.

NCC 2022 REQUIREMENTS

7 Star Energy Efficiency Rating

Tiled roofs require less insulation compared to sheet metal roofs. The higher pitches associated with tiled roofs also allows for a more thermally efficient roof space, granting you higher energy efficiency rating than other roofs.

Condensation

Unlike sheet metal roofs, unsarked tiled roofs meet the condensation requirements in NCC 2022. If you do wish to have sarking, the higher pitches of tiled roofs have less stringent ventilation requirements.

Thermal Breaks

Tiled roofs do not require expensive thermal breaks under new NCC 2022 requirements. This allows you to save money installing your next tiled roof.

REROOFING FROM TILE TO TILE



ARTA recommends that all existing tiled roofs **always** be reroofed with new tiles, as the increased weight of the roof would have been considered when assessing your home's structural performance.

Similarly, as roof tiles have greater thermal properties than sheet metal, by replacing like-for-like, you are ensuring **your home's energy efficiency will not decrease.**

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Additional roofing requirements specified on the following page



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REROOFING FROM METAL TO TILE



Consider installing sarking in compliance with AS 2050 to maximise the performance of your new tiled roof.

Ensure your existing structure can support the increased weight of roof tiles. Switching to tiles will provide you with a more durable and sustainable roof.

Roof tiles can withstand impacts from most hailstones (2-3 cm) that may otherwise cause dents in metal roofing sheets. This leads to lower comparative insurance premiums for tiled roofs.

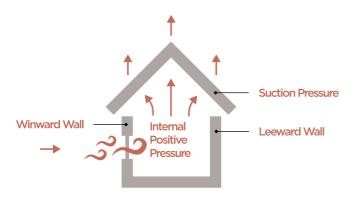
ADDITIONAL REQUIREMENTS FOR METAL ROOFS A



Design Requirements:

Different design and construction requirements are set between tiled and metal roofs:

- Higher wind rating for metal roofs in the same area
- Applicable pitches
- Fixing/connection to gutters, insulation (sarking), etc.



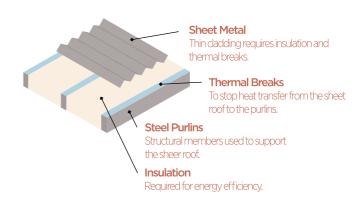
Tie-down Requirements:

You will have to check your roofing tie downs, as stronger tie-downs are required for sheet metal roofs compared to tiled roofs in the same wind class.



Fixing Requirements

- Ridge ties are always required
- Ridge strapped to ridge strut
- Ridge strut strapped to a wall plate
- Strapping rafter to under purlin
- Timber battens are to be fixed with screws when within 1200 mm of a roof edge
- Metal battens are required to be fixed with screws.



Thermal Breaks for Metal Roofs:

Under NCC 2022, sheet metal roofs require thermal breaks to meet increased energy efficiency requirements.

10 Steps for the Perfect Reroof -



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10 STEPS FOR THE PERFECT REROOF

There are 10 steps to getting your reroof done right. Follow these steps, along with manufacturer guidelines to ensure the longevity of your new tiled roof.

Safety FIRST

 Safety is a priority. Before commencing any inspections or work, ensure a guard rail and ladder are installed and fixed. 6

Tiles

 New roof tiles should be brought up to the roof using an elevator belt.

2

Remove

 Old roof tiles or metal roof sheets must be removed first.

Laying

 Tiles are laid sequentially from bottom to top. Fixing clips or nails are used to secure the new tiles.

3

Inspect

• Check roof elements, including battens to determine whether they need replacement.

8

Ridges

 All hip and ridge lines are covered with appropriate ridge fittings, which are bedded to the roof with mortar.

4

Sarking*

 Unroll sarking across the roof, starting at the bottom of the rafter. 9

Pointing

 Pointing is a flexible material that covers the mortar on hips and ridges. It acts as a mechanical fastener for the ridges. It is also used to finish the tiles at the roof gables.

5

Battens*

 New battens are to be fixed to the rafters with a nail gun. 10

Finish

 Remove the guard rail and ladder, and ensure that all debris is cleared. Make sure to recycle old tiles where practical ask your manufacturer if in doubt!

*If required

BUILDING PERMIT REQUIREMENTS

It has been noted that some regions require no mandatory building permit when replacing a roofing material with the same type of material (i.e. tiles to tiles).

Building permits are required by some councils when the roofing material changes (i.e. from metal to tiles or vice versa). For example, Queensland Building and Construction Commission (QBCC) has adopted a provision where a reroofing area greater than 20% of the existing roof will require a building permit (irrespective of like for like material). In NSW, no council approval is required to replace a roof provided that there are no structural changes to the building.

For the best alignment with latest recognised industry practice, owners are strongly recommended to consult professionals to ensure that their roofs follow the National Construction Code (NCC) 2022 requirements for roofing installation, regardless whether a building permit is required by your local council.



ARTA Health and Safety Content

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