



Heritage Fact Sheet Series 3 - Roofing and Guttering



The following fact sheet provides guidance on roofing and guttering for a property which is listed as a heritage item or located within the Bellinggen Heritage Conservation Area.

Water Damage

Keeping a building dry is essential and the first priority in restoration and conservation works before commencing works such as painting. Ensure that your building is watertight, and that the stormwater is being dispersed away from the building. Water is a major source of damage and cause of rising damp.



Bellingen former bakery buildings prior to conservation works.



Neglected guttering and stormwater had caused extensive rising damp and salt deposits on brickwork.

After restoration of roof and guttering



Consent requirements

Re-roofing a property which is listed as a Heritage Item or within a Heritage Conservation Area is a change to the 'fabric finish and appearance' and requires consent, but can generally be considered under the maintenance and minor works heritage exemptions under Clause 5.10(3) of the Bellingen Valley LEP 2010.

You need to submit a minor works application, or e mail a request to Council with information about your proposed work including the materials of the roof or guttering. If Council is satisfied that the work is in keeping with the heritage values, it may approve it in writing. This must be in place before you start work.

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Small repair jobs which match the existing/historic material or gutter profiles, such as inserting a new sheet, or replacing a piece of gutter to match, which do not substantially change the fabric finish and appearance can be carried out without the need for prior consent.

Traditional uncoloured metal roofing.

The predominant built character of this region is timber or masonry with metal corrugated roofing. Unless the building has an original tile roof, retaining or reinstating uncoloured traditional galvanised metal roofs is recommended to maintain unity to the building stock and streetscapes. This avoids a mismatch of different coloured metal roofing and allows new infill buildings to blend with the historic dwellings. Uncoloured metal also is neutral and a useful base for a variety of colour schemes. Galvanised steel is the best match for traditional corrugated sheeting.

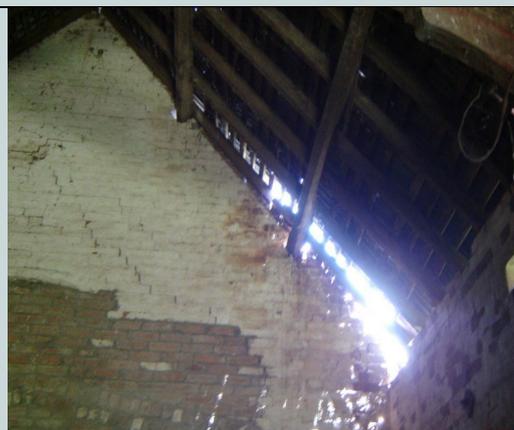
Historical Background

Shingles

Prior to the introduction of corrugated iron, many roofs of early buildings were covered with bark or timber shingles. Occasionally there are examples of these still in place under a corrugated roof. If you discover this, under a metal roof, it is important evidence of the history of the property and must be retained and carefully conserved.



Timber shingles on a mid-19th century verandah.



Close batten spacing is also another indicator of a former shingle roof.

Galvanised Iron and Steel

- Corrugated iron was exported to Australia from England in 1829 under the patent of Henry Palmer. Galvanising was patented in the 1830s and new machines were invented for corrugating iron sheets and curving iron. The base metal sheet changed from wrought iron to mild steel in the mid1800s. Early zinc coatings were hand dipped and tended to be thick and uneven. The first galvanising plant in Australia was set up in Sydney in 1860s.
- Modern processes now bond the zinc coating evenly over both sides of the steel sheets. It comes in three weights; the highest coating is 600gm/m² known as **Z600** with 300g each side of the sheet, the medium is Z450 and the light is Z275.
- If the original galvanised iron/steel roof still exists and is generally watertight, it is recommended that you retain it, repair as necessary and conserve it for as long as possible. The aim is to conserve as much of the historic material as possible and replace only what is necessary. The surface rust can be treated with a fish oil or painted to give it additional protection if required.
- If re-roofing is required, Galvanised Steel Z600 is the closest replacement and aesthetically matching product available.
- Original roofs were generally made in short sheets due to machinery rolling limitations and were made to a size that could be handled by one person and were able to be transported by horse and cart. If you have a short sheet roof, the roof should ideally be retained or replaced in this way to retain the historic character of the building, at least on roof elevations which are visible to the street. Traditional roofing screws rather than modern hexagonal screws are also recommended. The horizontal line is a feature of the roof and retains its traditional visual character. However full length sheets do offer more protection and less potential for corrosion at the joints.

Coloured Metal Roofing

Colour bonded steel was introduced to Australia in 1966 and is pre-painted with an oven baked paint system available in a wide variety of colours. It is not the preferred finish for a heritage item or historic property as it lacks the traditional appearance of the spangles in the metal and has a homogenous painted appearance. However, pale to mid greys may be used for new infill development and will harmonise with the overall pattern of uncoloured metal in the Conservation Areas.

Infill development with a grey colorbond roof.



Zincalume

Introduced to Australia in 1976, Zincalume is a zinc/aluminium alloy with an uncoloured metal finish. The metal sheets are thinner but more resistant to corrosion, however it cannot be mixed with galvanised steel due to electrochemical corrosion. Although galvanised steel is the preferred material for a historic property, zincalume is an alternative roofing product which will harmonise with the general uncoloured traditional roofing. It tends to be more reflective initially and has a smaller spangle but over time will dull off and is suitable for the infill and non-listed building stock within the Conservation Area.

Zincalume roof

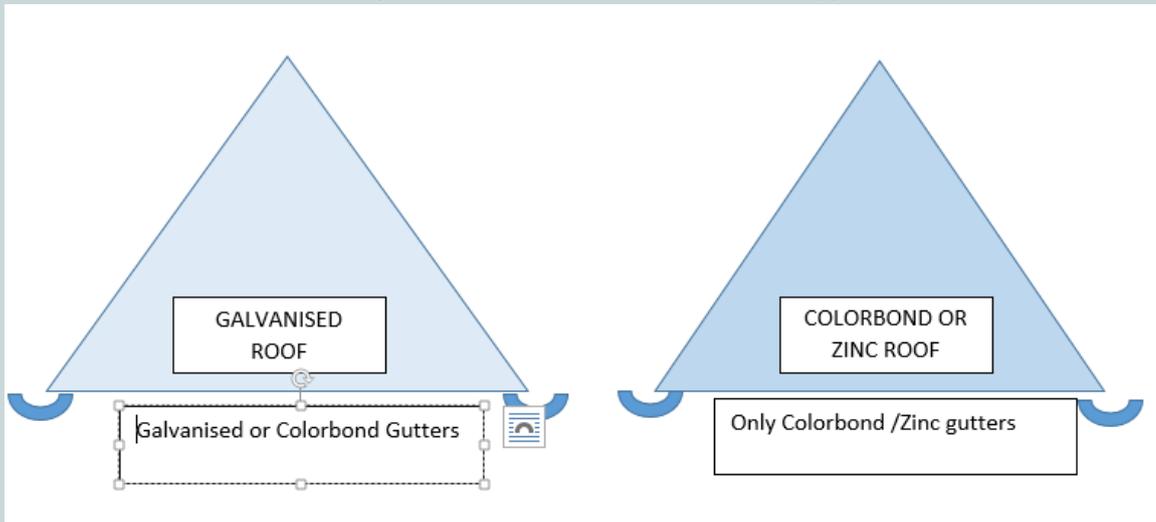


Zincalume roof on left hand side compared to a galvanised steel roof on the right-hand side.



Gutters

- The correct gutter must be used with the roof material to avoid galvanic corrosion
- The gutter profile should suit the historic era of the building, generally low front quad or ogee profile.
- Gutters should be non-perforated to retain the traditional appearance.



Buildings up to the late 1800s/early 1900s generally had 'Half Round' or 'Ogee' gutter profiles. Getting the details right is important in retaining the character of the building.

Ogee gutter with acroterions to corner.



New Ogee galvanised gutters and round downpipes.



Low front quad guttering



Downpipes

Replacement downpipes should be round or square metal profile on historic properties.

Traditional rainwater heads should be retained.



Replace round downpipes to match where original details exist.



Stormwater should be piped or channelled away from the base of the building. The pooling of water at the base of the building causes moisture in the foundations, rising damp in brickwork, attracts termites and can create more moisture in one part of the foundation than others leading to movement and cracking.



Need further information?

Council offers a free heritage advisory service and offers annual heritage grants to assist owners with re-roofing, guttering downpipes and stormwater dispersal. For further enquiries please contact Council's Planning Services Section on 02 6655 7300 or email council@bellingen.nsw.gov.au