



# Joints in flashings



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Expansion joints and non-movement control joints are sometimes needed in metal flashings. We look at when they are required and how to construct them.

**ACCEPTABLE SOLUTION** E2/AS1 to Building Code clause E2 *External moisture* sets out where metal flashings require joints. Construction details are given in the *NZ Metal Roof and Wall Cladding Code of Practice*.

## Expansion joints

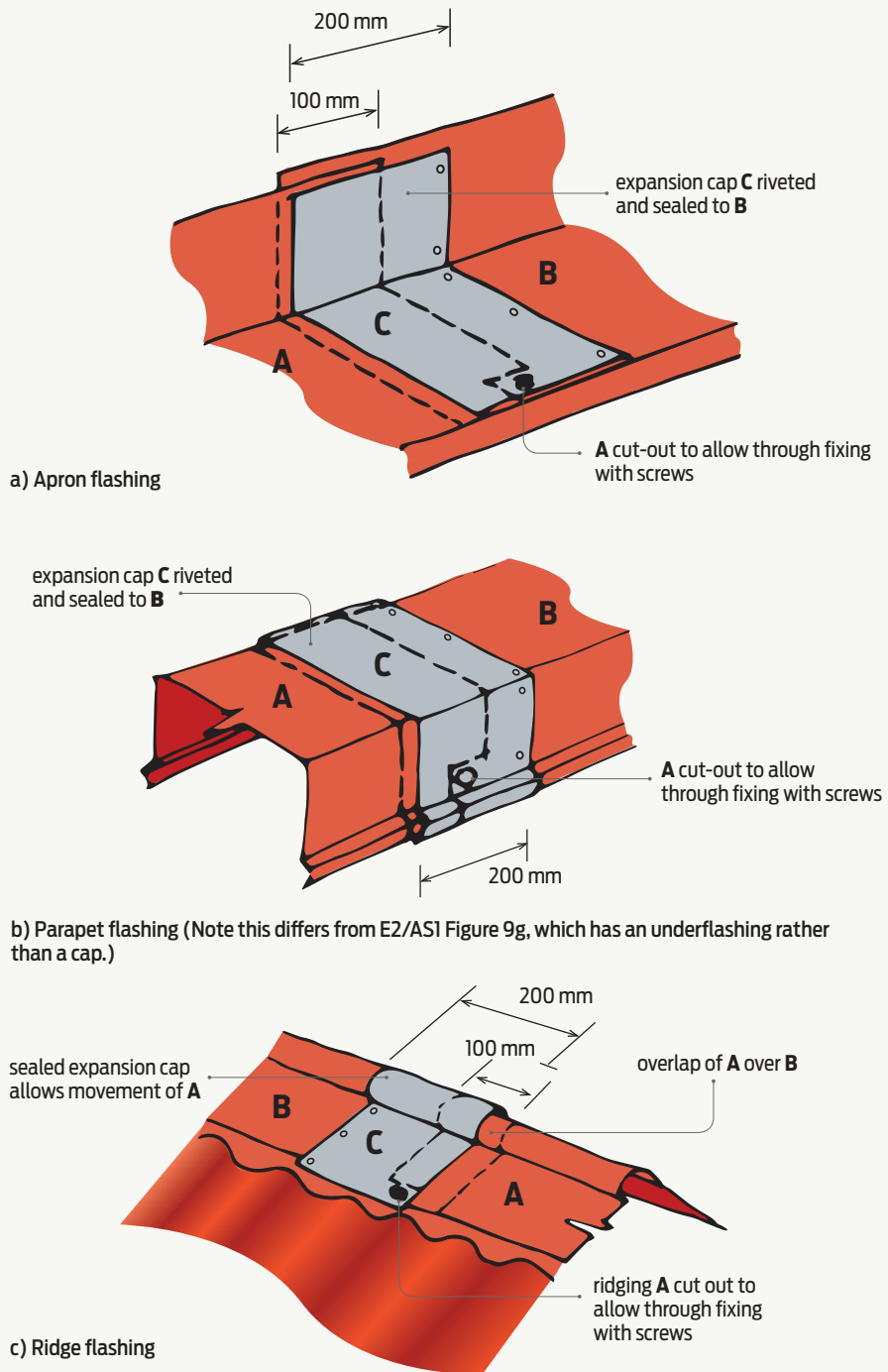
Expansion joints that allow for thermal movement are required wherever both ends of the flashing are constrained (see Figure 1). E2/AS1 requires:

- maximum spacings at:
  - 12 m for light-coloured steel and stainless steel
  - 8 m for dark-coloured steel, copper and aluminium
- a 200 mm minimum lap, and the fixings on both sides of the lap must be able to slide (E2/AS1 clause 4.5.2(b) and Figure 6, and clause 6.4 and Figure 9(g)).

## Non-movement control joints

Non-movement control joint laps:

- are mechanically fixed by rivets spaced at 50 mm maximum centres
- are sealed against moisture ingress
- have 100 mm minimum overlap (but 150 mm recommended) except where the pitch of the flashing is 15° or less. In that case, there must be a 100 mm minimum overlap and the flashing underneath the lap must have a hook at the edge.



**Figure 1**

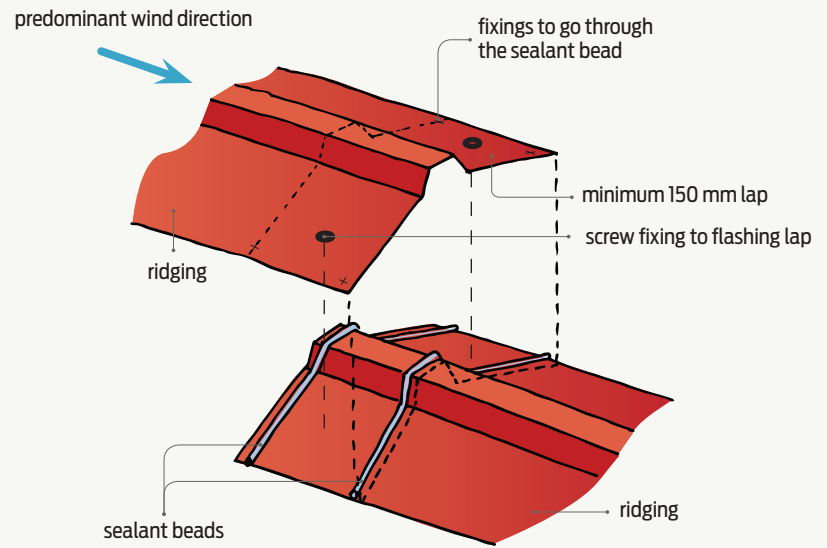
**Expansion joints to allow thermal movement (from NZ Metal Roof and Wall Cladding Code of Practice).**

Screws and rivets (if used) must be compatible with the flashing material and may be a sealing type or a blind rivet.

### Sealing

Sealing can be either using solder for uncoated galvanised steel, zinc or copper or the application of two rows of neutral-cure silicone sealant under the overlap for all other metal flashings (see Figure 2).

Exposed flashings such as barge and ridge flashings must be fixed along both edges. Laps in ridge or parapet flashings should face away from the prevailing wind direction. ◀



**Figure 2** Ridging lap minimum 150 mm.