



# KEEPING FRAMING SPACES DRY

**Air in drained and vented cavity spaces may be moist, so it is important when detailing claddings to restrict air movement from the cavity to hidden framing spaces, such as the roof space.**

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**D**rained and vented cavities allow any moisture that penetrates behind the cladding to drain to the base of the cavity and any remaining moisture to be safely held there while it dries out. Because of this, the cavity space is likely to contain damp air, similar to the damp air that occurs in a brick veneer cavity. This damp air must be restricted from flowing into hidden framing cavities, or into roof or soffit spaces.

Drained and vented cavities will dry if they are open at the base. All, except brick veneer cavities, do not need ventilation at the top, and in most cases, it should be avoided. Some typical details for doing this are described below.

## Typical eaves detail

Figure 1 shows a typical eaves detail, common to many of the homes being constructed using drained and vented cavities.

Although a continuous plate is generally used to support the flat soffit, it is advisable to provide a continuous horizontal cavity batten to support the top of the cladding. This will prevent damp air escaping from the cavity and into the soffit. It is also important to ensure that the wall underlay extends the full height to the top of the top plate.

## No roof overhang

Where the wall cavity terminates at the eaves and there is no roof overhang, the fascia is often supported by dwangs or blocking. This will not close the roof space from a drained and vented cavity.

A continuous batten must be provided to close off the framing cavity from the roof space (see Figure 2). The wall underlay must again be continuous to the top of the top plate. To provide additional security, the underlay can be extended beyond the top plate and turned under the blocking.

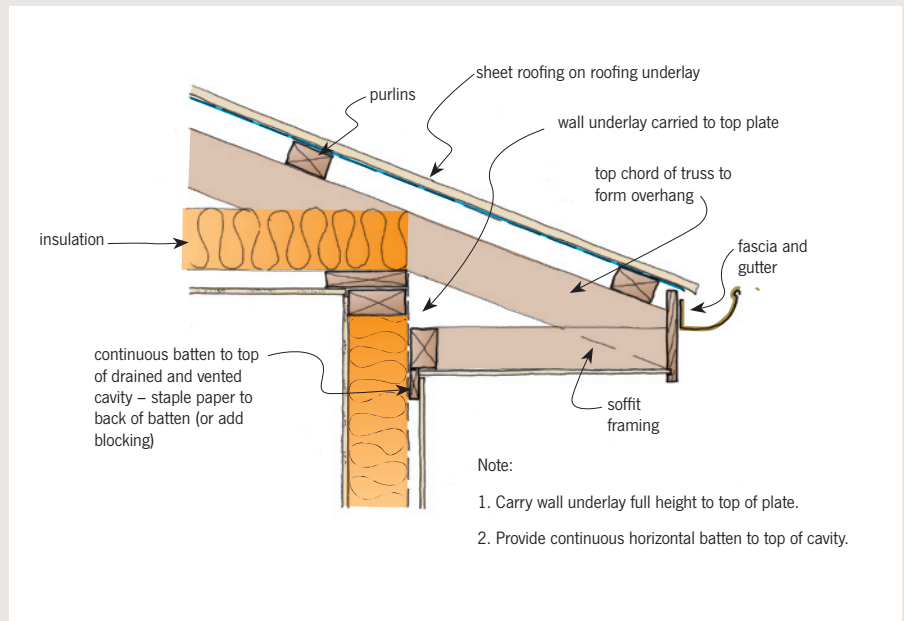


Figure 1: Typical eaves detail.

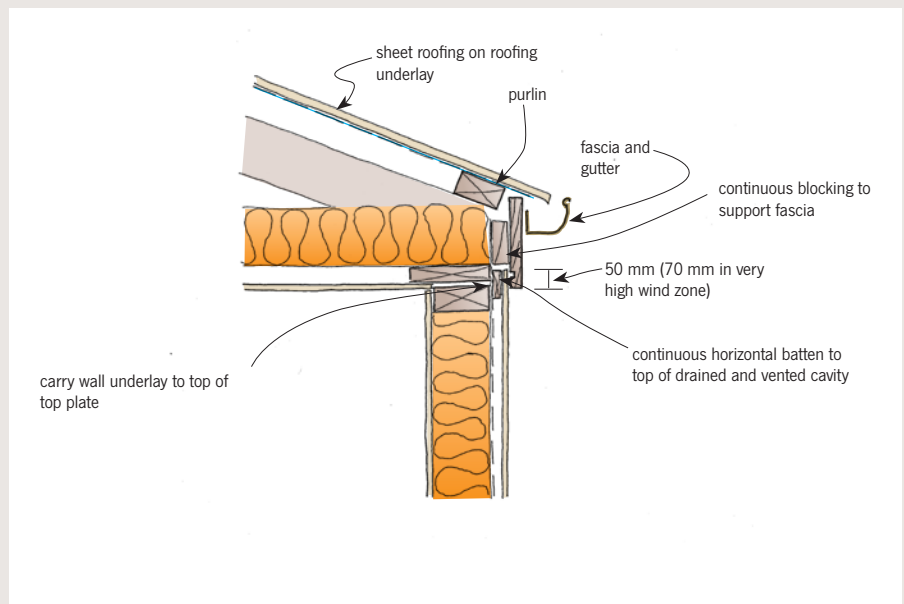


Figure 2: No roof overhang detail.

### Eaves with exposed rafters

Where exposed rafters are used with the soffit lining fixed to the underside of the purlins or, alternatively, over the rafters, there is again the possibility of damp air from the drained and vented cavity entering the roof space.

The tactic is again to provide a continuous horizontal cavity batten to close off the cavity space and prevent air escaping. This batten is best placed below the rafters in a continuous length, rather than attempting to provide short lengths between the rafters, which may not completely seal the top of the cavity. The extension of the cladding (or facing piece) above this level can be supported on short vertical battens fixed to the rafters. Provide flexible flashing tape to rafters and battens as shown in Figures 3 and 4 to prevent water entering around the rafter.

### Inter-storey junctions

Where a drained and vented cavity is continuous over two storeys, there will be no problems. However, where it terminates at an inter-storey level (as shown in Figure 5), the damp air contained within the cavity can move into the dry floor cavity. This may result in serious and expensive damage.

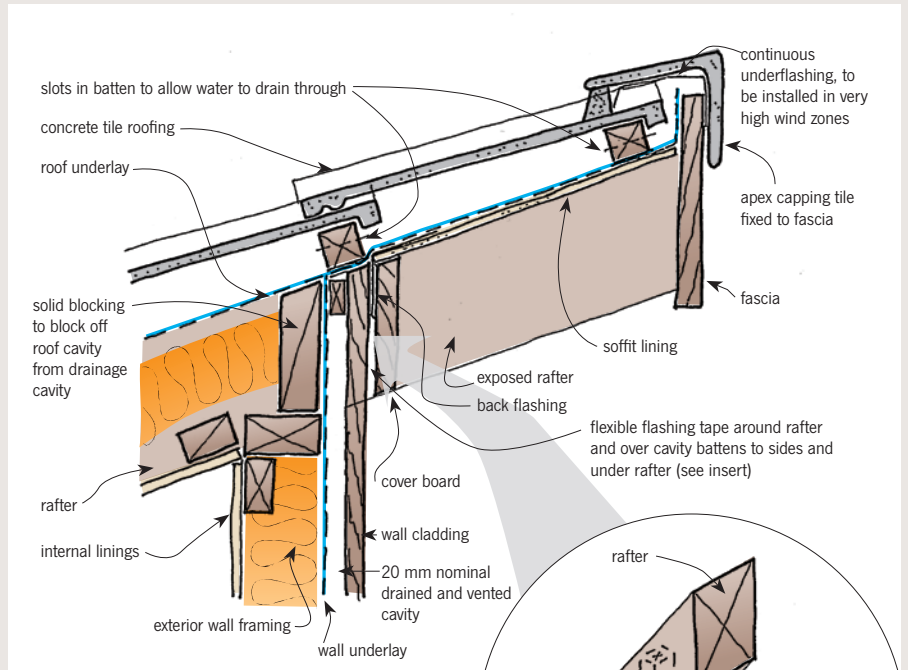


Figure 3: Eaves with exposed rafters detail.

To prevent this happening, it is important to ensure that the cladding cavity is fully closed off. Again, the use of a continuous horizontal cavity batten is the answer. ◀

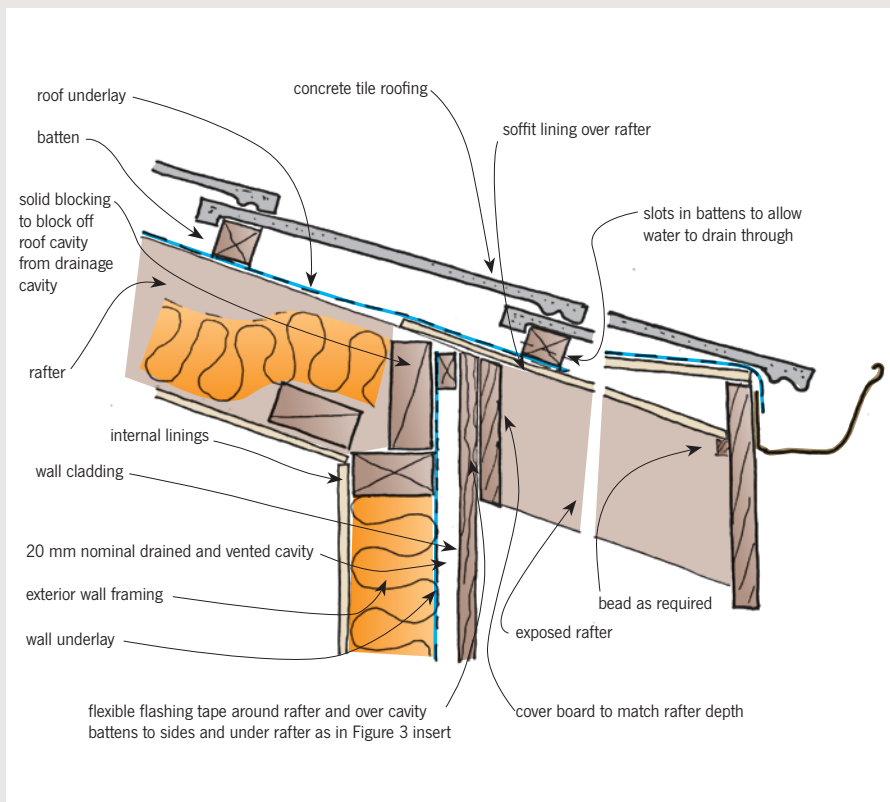
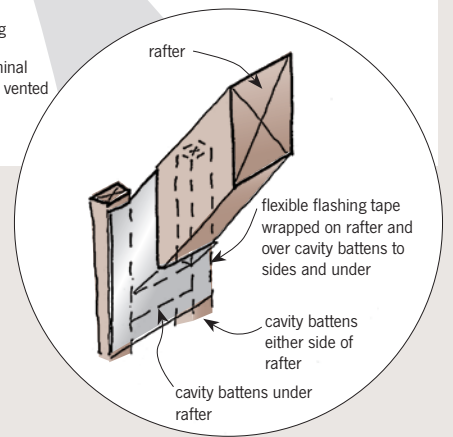


Figure 4: Eaves with exposed rafters detail.

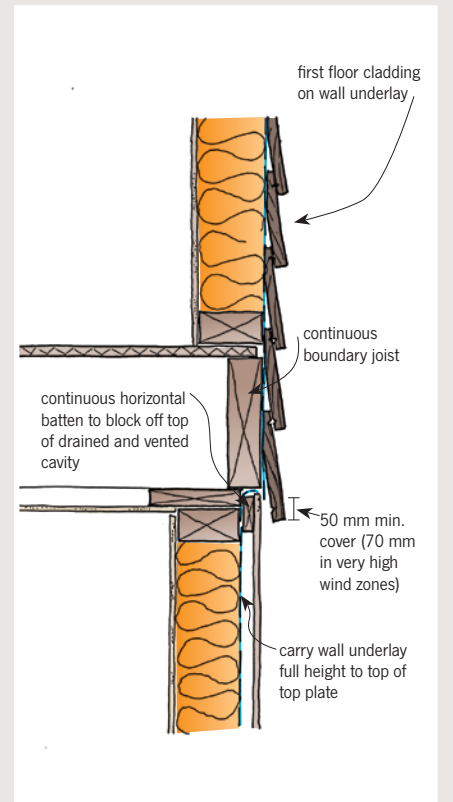


Figure 5: Inter-storey junction detail.