



Detailing windows for brick veneer

NZS 3604 and NZBC E2/AS1 offer limited details for windows in brick veneer but BRANZ has a number of recommendations.

Solutions for detailing windows in brick veneer often come from interpreting window solutions for other cladding systems. However, brick veneer has its own unique characteristics to be considered when detailing.

Window head

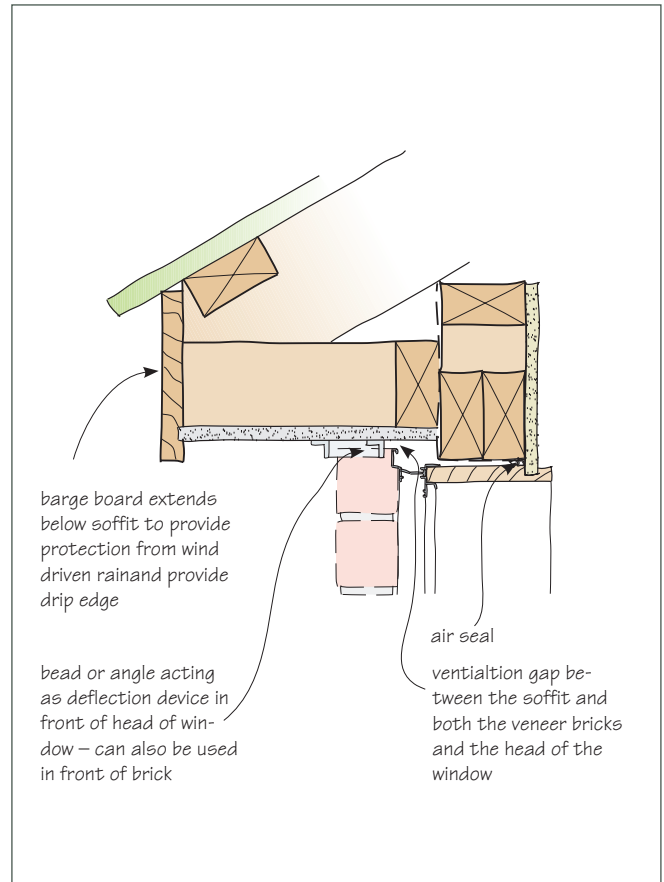
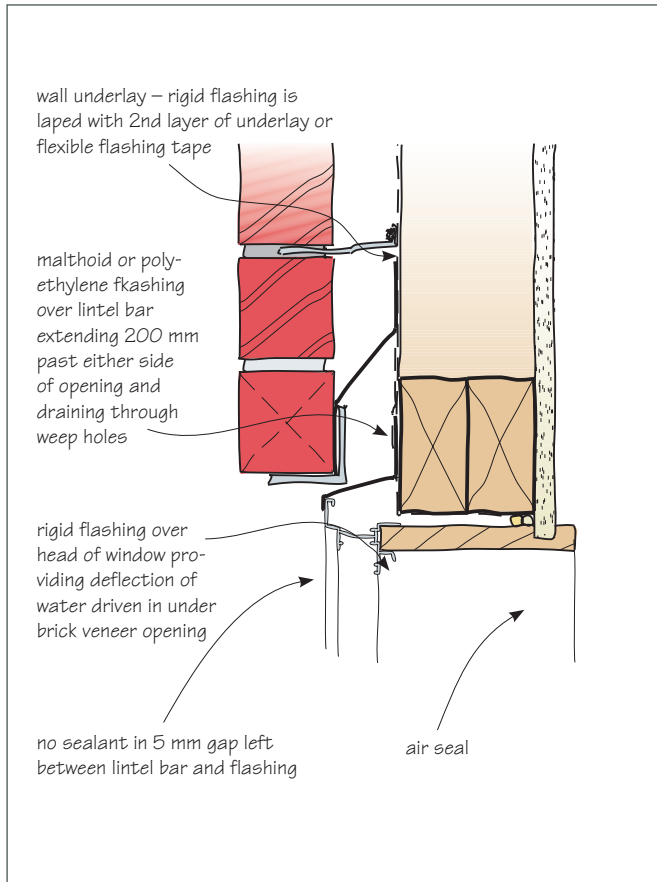
The current practice of using a malthoid or polyethylene flashing span-

ning from the structural frame over the lintel bar and extending 200 mm each side of the window should be maintained. This directs any moisture in the cavity above the window, out over the lintel bar and through the weep holes.

BRANZ also recommends installing a rigid flashing over the window flange, for the full width of the window (without extending 200

mm either side). This will provide deflection against wind-driven rain and hosed water that could get into the gap between the window reveal and head of the framed opening (see Figure 1). One option is to fix this rigid flashing to the structural frame.

If the window flange is installed up to the soffit, BRANZ recommends installing a deflection device (like a bead or angle) forward of the win-



dow (see Figure 2). A gap should be maintained between the window flange and soffit to still allow the required venting at the top of the cavity.

Window jamb

A malthoid or polyethylene flashing should be installed from the structural frame to the back face of the window jamb flange (see Figure 3), to deflect any water driven past the window face from entering the framed opening. It is not necessary to seal the gap between the brick and the window flange.

Window sill

BRANZ recommends not sealing the gap between the window sill flange and the sill bricks. This gap allows any water that may have entered the cavity past the window flange (particularly through the mitre joints), to escape outside and not be held against the flange material. Make sure a slope (typically 15°) is maintained on the sill bricks to direct water outside. Also ensure a gap (at least greater than 6 mm) is maintained between the sill bricks and the structural frame, to prevent damage to the underlay, and potential bridging of the cavity.

A malthoid or polyethylene flashing should be installed on the structural frame under the window. One option is to span this flashing across the cavity and embed it in the mortar joint one course below the window sill, with weep holes (acting also as vent holes) above the flashing. However, BRANZ considers this unnecessary because:

- water on the flashing can escape at the bottom of the wall
- weep holes under the window are often regarded as unsightly and liable to be filled
- venting is already provided at the top of the wall above the window.

The other option, which BRANZ recommends, is for the flashing to have a drip edge of 15 mm minimum distance from the wall underlay. This directs water away from the underlay, towards the back face of the brick, and down to the weep holes at the bottom of the cavity. A tilting fillet should be installed to maintain the drip edge, as the flashing is otherwise liable to flatten against the underlay over time (see Figure 4).

Mind the gap

The main point to remember is to not seal the gap (typically 1–2 mm) between the window flange and the brick anywhere around the opening. Any sealant (or foam strip) installed provides little improvement because it:

- doesn't substantively improve the air seal already provided by the seals at the window reveal
- has the back-up of strip malthoid or polyethylene flashings protecting the opening at the jambs
- cannot be installed as a proper sealant joint with a backing rod behind
- will potentially be dislodged by hosed water when cleaning the windows
- only prevents a limited amount of rain into what is already a wet system
- is not recommended by sealant manufacturers
- can look untidy.

