



RETROFITTING FLEXIBLE WALL UNDERLAY

Older houses may have no building paper. Should it be installed during renovations, and how can this be done?

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Older houses up to the 1950s often have no building paper installed in external walls. This is easy to rectify when the exterior wall cladding is removed.

However, retrofitting a flexible wall underlay (that is, kraft building papers or synthetic building wraps) becomes complicated when only the interior lining is removed. So does it need to be installed, particularly if, after many years, there is no evidence that the lack of building paper has caused any problems?

Role of building paper or building wrap

Flexible wall underlay plays a role in the air and water management system of a wall by:

- restricting the movement of moisture that has got through the cladding from getting into the framing and insulation
- reducing air flow through the wall
- allowing water vapour to escape from the interior
- temporarily absorbing condensation when an absorbent material is used (this may also be done by an absorbent cladding, allowing

the use of a non-absorbent flexible wall underlay)

- protecting and helping to maintain the thermal efficiency of insulation by keeping air still within the framing.

Building Act requirements

Section 112 of the Building Act requires that where alterations are made to an existing building, the altered building must comply with the provisions of the Building Code to at least the same extent as it did before the alteration. (The exceptions to this are means of escape from fire, and access and facilities for people with disabilities, which must both comply as nearly as reasonably practicable as if the building is new.)

Even where there have been no signs of water entry, if cladding is removed then installation of a wall underlay is required (all details published in E2/AS1 require the installation of a flexible or rigid wall underlay).

Installing from the inside

One method of installing flexible wall underlay from the inside is to staple the building wrap

between the studs (see Figure 1). However, this retrofitted underlay may only perform some of its expected roles – it may not restrict the movement of moisture or reduce air flow through the wall.

Older houses that did not have building paper often have no dwangs (or noggs), so installation of flexible wall underlay between the studs is straightforward. The flexible wall underlay may be continuous around the inside face of the studs and, if the wall has dwangs, these may be removed and replaced as required. Remember to start the wall underlay at the top and work down so any laps occur in the correct sequence.

Insulation can then be installed from the inside.

Brick veneer problematic

Brick veneer houses built during the 1950s and 60s may not have had building paper installed but removing the bricks and ties to install flexible wall underlay is impractical. Where building paper and insulation is being installed, follow Figure 1. ◀

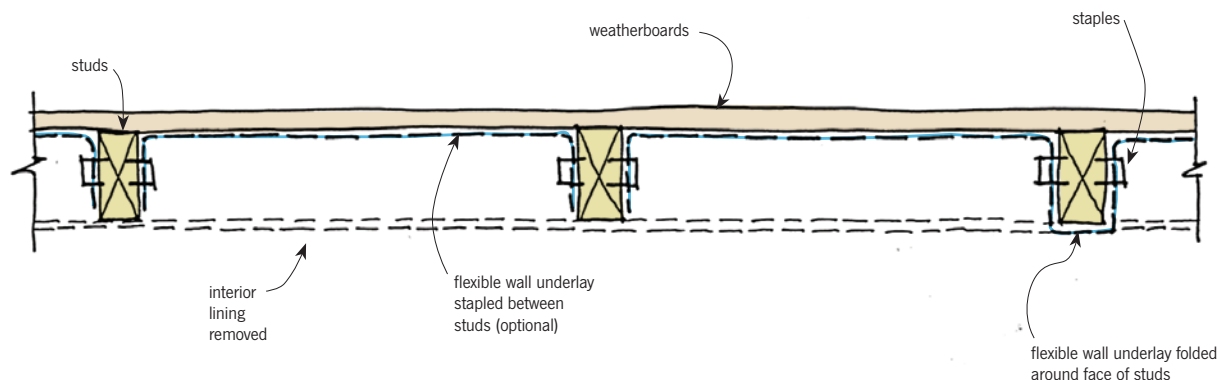


Figure 1: Horizontal section through wall framing.